



ELINOR, Animal Town's most curious bunny rabbit, and her friends ARI (a bat) and OLIVE (an elephant) ask the questions in every little kid's mind, and explore the WONDERFUL and AMAZING ways that Nature connects to our everyday lives.

Welcome to ELINOR WONDERS WHY!

ELINOR WONDERS WHY inspires young children's wonder and curiosity about nature and teaches them the basic scientific skills they need to answer their own questions.

In animated episodes and interactive media experiences, Elinor Wonders Why aims to encourage children to follow their curiosity about nature, to ask questions when they don't understand, and to find answers using basic science practices.

We hope to show children that science is not just a list of facts, but a way of answering questions and learning about the world. More specifically, children will learn basic concepts in life science and see how ideas from nature can connect to their everyday lives.

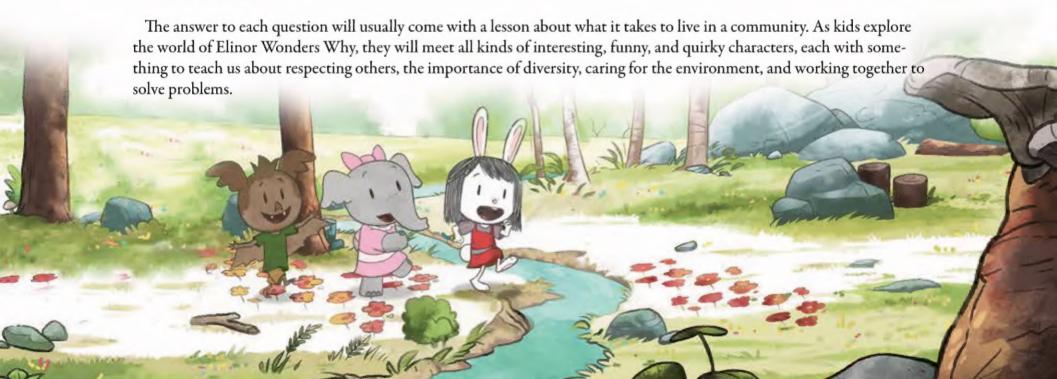
Elinor Wonders Why encompasses:

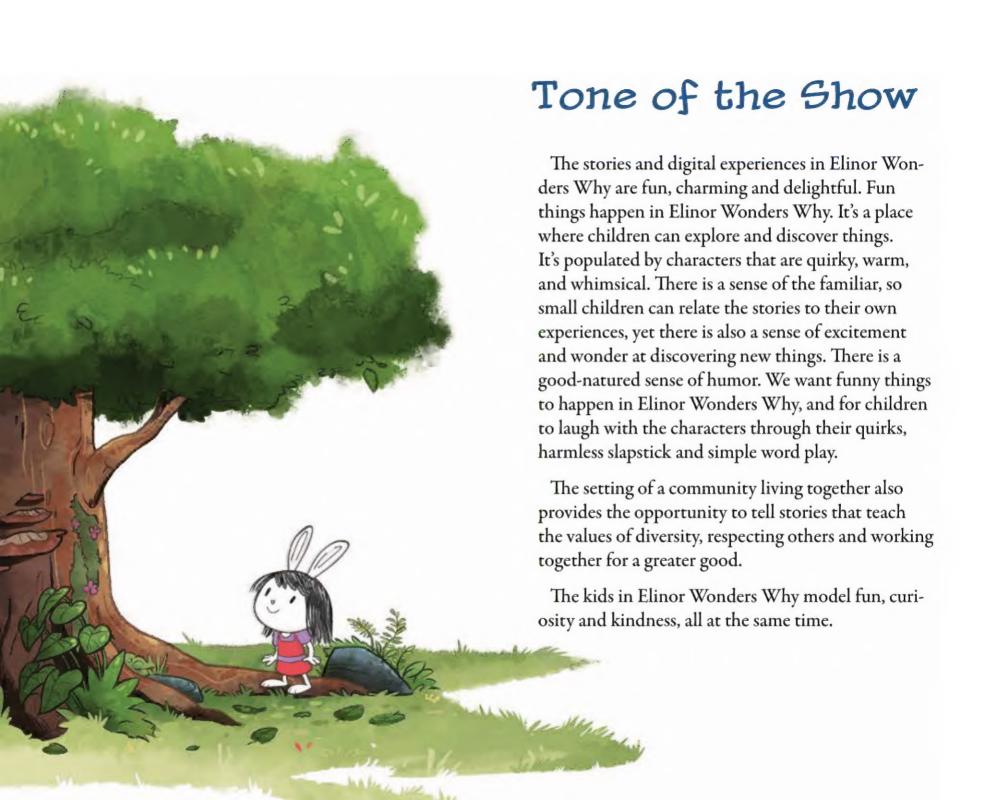
- Broadcast and Digital Animated Episodes
- Games and Interactive Experiences
- An Online Comic Strip
- Resources for Parents and Teachers

Curiosity, Nature and Community

The stories in ELINOR WONDERS WHY center around Elinor, Animal Town's most curious and observant bunny rabbit. In each episode and interactive experience, Elinor models for children her amazing powers of observation, her willingness to experiment, and her positive attitude (the basic tools of science) and uses them to understand and discover something new about the world around her. When she sees something she doesn't understand – how birds can soar without flapping, or how fish can breathe underwater, or how Velcro can stick without feeling sticky – she just can't let it go until she understands it. Elinor encourages children and parents at home to ask their own questions and experience the joy of discovery and understanding.

In discovering the answer to a central question, Elinor will learn something about Nature's ingenious inventions, and how those can connect to ideas in our world. For example, on one episode, kids will see Elinor explore how Nature uses liquids of different goopiness in different situations, and watch as Elinor solves a silly problem when the sauce at the town picnic is way too thick. On another episode, kids will see Elinor puzzle over how Velcro works, and stumble across the answer when she and her friends find the patch of sticky burs that inspired its invention. When Elinor uses what she has learned from Nature, it helps the audience connect what they see in the natural world to what they see in the designed world around them.









Elinor is a precocious little bunny rabbit with seemingly boundless energy to explore and learn interesting things. She is silly and is not afraid to voice her opinion. Elinor likes to think that she has a super power: the power of observation. She often says out loud, "That is SO interesting!" whenever she notices an interesting phenomenon in nature. She likes to charge ahead and is very excited to try things out. When she sees something that she is interested in or wants to understand, she will not let go of it until she understands it. Sometimes, she is more focused on the mystery at hand than other, more practical things (like listening to her teacher). When she wants to dig into something, she will say "We need MORE observations."

But if her first ideas don't work she sometimes gets momentarily discouraged. Of course, her friends and family are always there to remind her to keep trying. She is very good at sharing her enthusiasm, and can get a crowd of kids (or her two best friends) interested in almost anything.

Elinor is very physical in the way that she explores the world and expresses herself. She gets very close to things that interest her, and has no hesitation about diving into bushes or scrambling (safely) up a tree. Her ears are very expressive, reflecting what she is feeling.

Elinor is also a very adventurous eater – she will try almost anything.

CHARACTER DESCRIPTIONS



Arī is one of Elinor's best friends. He is a kid bat with a fun sense of humor and a dramatic personality. He makes a lot of silly jokes (especially puns, often ending a scene or episode with a funny line), and isn't afraid to be the center of attention or to make himself look a bit silly.

Ari is not as adventurous as his friends, following their lead rather than charging ahead. In addition, he worries about following the rules and will often say out loud dramatic descriptions of all the trouble they are going to get into. He will often say "I don't know about this" or "But what about..."

But he loves their projects and adventures and can't imagine being left behind, so he always joins them in the end.

Ari has functioning wings and can take off from the ground and fly for short distances. He uses a few flaps to make a big hop over an obstacle or get up into a tree.

Ari has a big appetite, but doesn't care much about what he eats.

Ari is imaginative but forgetful.

CHARACTER DESCRIPTIONS



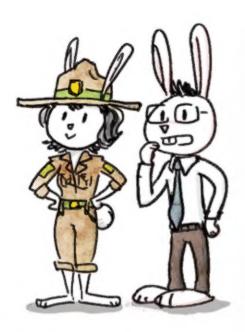
Olive is also one of Elinor's best friends. She has a warm and generous personality, and is very perceptive about others.

She loves books and is the best reader in the group. She also has an excellent memory, so she often has a useful tidbit of information to share with the group. Olive loves mysteries (she will often say "Sounds like a mystery!"). She loves being the note-taker in the group. She likes to organize their thoughts and think carefully, often laying the groundwork for Elinor or Ari to make an interesting connection.

Olive doesn't run or jump around as much as Elinor and Ari, but she's as strong as an elephant (at least, a kid elephant).

Olive's trunk is very flexible and useful. Since her hands don't have very dexterous fingers, she uses her trunk to make gestures, and to hold or manipulate things like a crayon or a fork.

Olive is a bit of a picky eater. She writes observations about the food she eats in a little notebook.



Ranger Rabbit & Mr. Rabbit are Elinor's parents. Elinor's mom, the town's head Park Ranger, is a good leader in the community. She often teaches Elinor about nature and about the importance of listening and being considerate of the needs of others. Mr. Rabbit is a scientist, and often takes the kids out on field trips to explore the town's natural surroundings. Together, they often discuss how to best care for the environment and our fragile ecosystem.

Joe Mouse and Gee Raffe are Ranger Rabbit's deputies. Joe Mouse is a gruff and sometimes grumpy mouse. He cares about the community, but often runs out of patience with the town animals. Ms. Raffe's neck is so long, we often only hear what she says from above off-screen. She is the Ranger's Office's number cruncher (she knows all of the town's statistics), and has a dry sense of humor.





Ms. Mole is the kids' teacher at school. She has been in the classroom longer than anyone can remember, so she's seen it all, but she hasn't lost her energy for teaching. She is quirky and well-versed in a child's sense of humor, with a fine-tuned sense of how to talk to access a child's world-view and speak to them in a way that will tickle and intrigue them. Her sense of humor is on the goofy side; she likes to be silly to put the children at ease and make them feel comfortable.

Elinor's Friends and Town Residents are a diverse bunch of funny and

quirky characters that enrich Elinor's life and provide a constant source of amusing "tempest in a teapot" problems for Elinor and her best friends to resolve. Below is a sample list of characters that might appear on the show:



Sample Classmates:

Sally Beaver is very shy and quiet but she is an amazing builder and can rig up incredible things in a flash, carving them with her teeth.

The Goat Twins are Irish twins (they are from Ireland) and are a little strange. They are cheerful but often startle people when they finish each other's sentences or appear out of the blue.

Gilas Cheetah is an energetic kid who moves really fast. He will often appear, make a short comment or touch something and then dash off immediately in a puff of dust.

Kai Wombat is slow-moving and often napping. He is like a little surf dude in the making.

Camilla Dromedary (don't call her a camel) is slightly snooty (she prefers the term "refined"), though she still loves to join in the fun.

Tito Mouse is that kid every classroom has: the one that can't stop and loves to run into things.

Sample Town Residents:

Ms. Gorilla runs the local town diner. She likes to think of herself as a gourmet chef, under-appreciated by the locals. She loves to feed the town kids good food.

Mademoiselle Hippo moved to town from France, and is often talking about the differences between how things work in Animal Town and in Paris. It is sincere and not judgmental, saved from pretentiousness by its honesty. She is large yet impressively graceful and elegant, moving with the precision of a ballet dancer.

Professor Lion is a busybody, always sticking his nose into what's going on. Often he will interrupt a conversation and ask to have things explained again. But he doesn't like when people touch his things, like the bike he rides around town.

Martha Cow lives alone and has a house full of pets. She is very in touch with Nature. Her pets are lizards and birds (and a few bugs). She loves taking care of animals and is very excited whenever Elinor and friends come visit.

Story Guidelines

The stories in Elinor Wonders Why are charming and fun. They delight: Situations and plot points feel surprising and unexpected. There is a sense of fun when all the pieces fall together.

There is no set story structure, but each story contains these three essential elements:

- There is something driving the story. It could be something that a character wants to do or accomplish, or a problem that needs to be solved, or something that a character simply wants to know.
- There is an element of curiosity and inquiry. Curiosity can drive the episode, or it can be something that leads to a solution or a path forward.
- Children make a connection between Nature and the designed world around them.

A great place to start is with a good question -- the kind of question that every kid wonders about the world around them: if you were a little kid and you looked around, what kind of question would you have? Stories should always tie to something most kids can relate to.

It is important that each episode story remains relatively simple. A typical story will communicate <u>one idea</u> from the curriculum, and consist of at most three story beats. This leaves plenty of room for great character moments, a fun gag scene, and pacing that gives kids a chance to absorb what is going on.

The grown-ups in Elinor Wonders Why are warm and nurturing, but they are also quirky (to a kid) and funny. Few things make a kid giggle more than an adult being silly. Very importantly, the adults in Elinor Wonders Why don't always know the answers, but they know how to gently guide Elinor and her friends to find the answers themselves. We want Elinor and her friends to model curiosity and inquiry for children in a way that is positive and led by the children.

The idea is to allow the viewer to experience the joy of discovery and understanding along with Elinor through simple science-based exploration, and provide a template for parents and caregivers to follow at home.



Animal Town

Animal Town (where Elinor lives) is a small town embedded in a forest. It is a place where children can explore and discover things. We want Animal Town to feel real to our audience and for kids to look forward to visiting there. It should feel familiar and reassuring, yet also fun and exciting.

Animal Town is small enough that most of the animals that live there know each other, but there are always new things and new characters to be discovered. It is connected to a larger world, though we rarely see it. In some special episodes, characters will travel to nearby busier cities or visit relatives in other towns.

The mixture of animals in Animal Town is a model for diversity in our world. Some life science lessons (like those about birds, bugs, plants and reptiles) come from our characters observing them in Nature, just as kids would do in our world. Other lessons (like those about mammals, which all of our speaking characters are) are depi cted as lessons about how we're all differently abled, or how not everyone does things the same way. Animal Town is populated by residents of different sizes, colors, abilities and backgrounds. The kids and characters in Elinor Wonders Why embrace these differences, and treat them as normal and exciting to learn about.



Interactive Experiences

An essential component of Elinor Wonders Why are the interactive experiences, which children will engage through the website, apps and parent and teacher materials.

Our aim is for children to learn how to begin to answer their own questions. We want our digital games and other experiences to teach basic scientific practices and build children's confidence. While Elinor and her friends model scientific practices in the episodes, their presence in the interactive experiences serve as a bridge to teach children how to take these practices with them into their everyday lives.

An essential goal of the project is to equip children with the tools they need to explore the world around them and to find reliable answers to their questions. We aim to teach a generation of children that scientific practices are useful outside of strict "laboratory" settings, and can be applied to build knowledge about nearly anything that tickles their curiosity. The episodes allow them to observe characters modeling this behavior; the digital experiences give them interactive lessons in how to think and act scientifically; and the at-home activities give them an opportunity to put these lessons to use and "play the show."



Curriculum Plan Highlights

Please refer to the full Curriculum Overview appended to this guide for details on the educational goals and methods of Elinor Wonders Why. Seriously, go read it. There will be a quiz.

Elinor Wonders Why has three broad educational goals:

- (1) Children will learn foundational science and engineering practices and display greater confidence to discover science knowledge themselves through play, investigation, imaginative exploration and inquiry-based learning.
- (2) Children will learn and be able to describe **core knowledge about life sciences**, such as plant and animal life cycles, parts, adaptation and interaction.
- (3) Children will learn and be able to describe how ideas from nature can connect to our designed world and influence our design process.

These educational goals are fully aligned with the Ready To Learn Science Framework.

Each episode will focus on one core topic in life science. Many episodes will also feature one lesson about a connection between the natural world and the designed world. In addition, every episode will demonstrate several lessons in science practices, as the characters use them to better understand the science phenomena they are investigating.

For more specific curriculum elements and detailed guidance about how to implement the curriculum in episodes and digital experiences, please see the complete Elinor Wonders Why Curriculum Overview.



Sample Story Loglines

"Nature's Orchestra" - Elinor and friends learn how animals use sound in different ways when they go to a concert in the park, and they have to find a way to get everyone's attention.

"Sproing Boing" - While visiting Farmer Bear, Elinor and friends discover all the ways Nature uses springs, and use this to fashion springy shoes to help Olive pick apples from high branches.

"Souper Gardener" - Elinor visits her grandparents and learns that plants adapt to different environment when she realizes that the plants she needs to make her favorite soup don't grow there. "The Tomato Drop" - Elinor and friends learn how plants and animals float, and apply it to a school contest to see who can drop a tomato the highest without splatting.

"The Pokey Plant" - Elinor is initially sad when she learns the plant she's been assigned to take home is a weird-looking cactus, but soon learns the hidden beauty in its clever design.

"The Rabbit Family Reunion" - Elinor learns about patterns and biological traits when she meets her cousins, and distant cousins, at a big family reunion.

"The Mystery of the Zig Zag Plant" -When one of the class seedlings grows in a zig zag pattern, Detective Elinor and her friends must follow the clues that reveal the sequence of events that led to such a mysterious plant shape.

"The Clubhouse" - Elinor and her friends learn something from snails when membership in their Explorer's Club gets a little more popular than they anticipated.

"An Egg-citing Event" - Elinor learns about eggs as she tracks the progress of a bird nest outside her window. Things get crowded when the whole town comes to her bedroom to watch the exciting event.



Interstitials

The 40 one-and-a-half minute interstitials between episodes will rotate between two formats:

Ms Mole's Story Time: A brief story-book reading by Ms. Mole about some interesting fact in Nature. Kid-friendly infographic video (motion graphics), capped at the beginning and at the end by a funny, animated Ms. Mole.

Musical Moments in Science: a short song about how a scientist got curious about something and figured it out. Hosted by Señor Tapir, Animal's Town resident folk guitar crooner. As Señor Tapir gets into the song, the animation transitions to a simple infographic style music video.



Key Personnel



Jorge Cham (Co-Creator) is the cartoonist behind the popular online comic "Piled Higher and Deeper" (a.k.a. PHD Comics). He holds a PhD in Robotics from Stanford University and is a former Instructor and Research Associate at Caltech. His work as a researcher focused on Biomimetic Design and Neural Implants.

Daniel Whiteson (Co-Creator) is a professor of physics at the University of California, Irvine, and a fellow of the American Physical Society. He earned his PhD in Physics from the University of California at Berkeley and is an active researcher, using the Large Hadron Collider at CERN to search for exotic new particles.



Anna Jordan–Douglass (Digital Producer) is an award-winning interactive producer of educational media. She is the former Vice President, Interactive Media and Digital Development at The Jim Henson Company, and is currently a doctoral candidate in Curriculum & Instruction at the University of Wisconsin-Madison.



Gara Gweetman
(Educational Advisor) is an
Assistant Professor at the University of Rhode
Island and the Director of the Guiding Education in Math and Science Network. Sara is
also a children's media consultant and head
advisor for the U. S. Department of Education's Ready to Learn Children's Programing
grant. She has advised numerous projects with
a variety of multimedia platforms.



Contact Information

